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Magnetic susceptibility, remanent magnetization and coercivity variations along soil profile

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Abstract

The determination of magnetic susceptibility χ, remanent magnetization Jr and coercivity Bcr variations along Glifada automorphic soil profile has been carried out using χ - meter MS2-B and unique lab coercivity spectrometer permitting to distinguish paramagnetic magnetization and saturation remanent magnetization and to determine Jr and coercivity Bcr. These parameters give the consideration of soils components in terms of paramagnetic, ferromagnetic, ferrimagnetic, or antiferromagnetic states. The results have revealed that investigated soil profile was recorded in magnetic parameters variations and controlled by environmental factors.

Keywords

Coercivity, Magnetic minerals, Magnetic susceptibility, Remanent magnetization, Soil